

CLAIMS

What is claimed is:

1. A carpet backing of a polyurethane reaction product of:
a polyisocyanate;
5 an active hydrogen containing compound; and
a polyol reaction product of a first polyol and a vegetable oil, wherein the amount
of unreacted vegetable oil in the polyol reaction product is less than about 50 weight
percent; and
further wherein the tuftbind of the carpet backing is greater than 4.5 kg, ASTM D
10 1335.
2. The carpet backing of Claim 1, wherein the tuftbind of the carpet backing
is greater than 5.0 kg, ASTM D 1335.
- 15 3. The carpet backing of Claim 2, wherein the tuftbind of the carpet backing
is greater than 6.8 kg, ASTM D 1335.
4. The carpet backing of Claim 3, wherein the tuftbind of the carpet backing
is greater than 9.0 kg, ASTM D 1335.
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5. The carpet backing of Claim 1, wherein the polyol reaction product is
derived from up to about 20 parts by weight of a polyol having a weight average
molecular weight less than 800.
- 25 6. The carpet backing of Claim 5, wherein the polyol having a weight average
molecular weight less than 800 is sucrose, glycerin, dipropylene glycol and a blend
thereof.
7. The carpet backing of Claim 1, wherein the vegetable oil is selected from
30 palm oil, safflower oil, canola oil, soy oil, cottonseed oil and rapeseed oil.
8. The carpet backing of Claim 7, wherein the vegetable oil is soy oil.

9. The carpet backing of Claim 1, wherein the vegetable oil is blown.

10. The carpet backing of Claim 9, wherein the blown vegetable oil is selected from blown palm oil, blown safflower oil, blown canola oil, blown soy oil, blown cottonseed oil, and blown rapeseed oil.

11. The carpet backing of Claim 10, wherein the blown vegetable oil is blown soy oil.

12. A carpet backing for use in residential or commercial carpet comprising a polyurethane reaction product of:
a polyisocyanate;
an active hydrogen containing compound; and
a polyol reaction product of a first polyol and a vegetable oil, wherein the polyol reaction product contains less than about 50 percent by weight of unreacted vegetable oil and further wherein the polyol reaction product is derived from up to about 20 parts by weight of a polyol having a weight average molecular weight less than 800; and further wherein the tuftbind of the carpet backing is greater than 4.5 kg, ASTM D 1335.

13. The carpet backing of Claim 12, wherein the tuftbind of the carpet backing is greater than 5.0 kg, ASTM D 1335.

14. The carpet backing of Claim 13, wherein the tuftbind of the carpet backing is greater than 6.8 kg, ASTM D 1335.

15. The carpet backing of Claim 14, wherein the tuftbind of the carpet backing is greater than 9.0 kg, ASTM D 1335.

16. The carpet backing of Claim 12, wherein the carpet backing is a precoat, a laminate or foam coating.

17. The carpet backing of Claim 12, wherein the amount of unreacted vegetable oil in the polyol reaction product is less than about 34 weight percent.

18. The carpet backing of Claim 12, wherein the vegetable oil is selected from palm oil, safflower oil, canola oil, soy oil, cottonseed oil and rapeseed oil.

5 19. The carpet backing of Claim 18, wherein the vegetable oil is soy oil.

20. The carpet backing of Claim 18, wherein the vegetable oil is blown.

10 21. The carpet backing of Claim 12, further comprising up to about 200 parts by weight of a filler.

22. A residential or commercial carpet containing the carpet backing of Claim 1.

15 23. A residential or commercial carpet containing the carpet backing of Claim 12.